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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,412	05/21/2001	Seth M. Demsey	MS160304.1/40062.100US01	8482
7590	01/25/2005		EXAMINER	
Homer L. Knearl Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			BULLOCK JR, LEWIS ALEXANDER	
			ART UNIT	PAPER NUMBER
			2127	
DATE MAILED: 01/25/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/862,412	Applicant(s) DEMSEY ET AL.	
	Examiner Lewis A. Bullock, Jr.	Art Unit 2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 and 29-41 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-27 and 29-41 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-27 and 29-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over MADANY (U.S. Patent 6,199,196).

As to claims 1 and 14, MADANY teaches a computer program product encoding a computer program for executing on a computer system a computer process for generating a customized library (output file / package) for execution of an application (program) by a client, the client including one or more client-loaded types (component stored on client), the computer process comprising: identifying one or more application-referenced types (required or needed component / dependent component) on which the application depends for execution; identifying one or more client-needed types (required or needed component / dependent component) required by the client to execute the application, based on the application-referenced types and the client-loaded types; and generating the customized library (creates a list / output file / package) including the one or more client-needed types (required or needed component / dependent component) (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67; col. 6, lines 1 - col. 7, line 3) and sending the customized library and the application to the client (packaged together as an output file) (col. 9, lines 27-38). It would be obvious to one of ordinary skill in the

art that the created list / package is initially empty before the necessary components are added to the list as disclosed in MADANY.

As to claim 2, MADANY teaches the operation of generating a customized library comprises inserting only client-needed types into the customized library (required or needed component / dependent component) (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67).

As to claim 3, MADANY teaches the operation of generating a customized library comprises: inserting all client-needed types and all client-loaded types into the customized library (required or needed component / dependent component) (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67). It is obvious to one skilled in the art that all of the components to execute the class are sent as disclosed in MADANY when one does not care for wasting bandwidth.

As to claim 4, MADANY teaches the operation of identifying one or more application-referenced types comprises: identifying a version identifier of at least one of an application-referenced type and a client-needed type (via a list of file locations) (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67).

As to claims 5 and 6, MADANY teaches the operation of generating a customized library comprises: excluding from the customized library one or more non-

identified types (locally stored component), each non-identified type being already loaded on the client or not being referenced by the application (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67; col. 6, lines 1 - col. 7, line 3).

As to claim 7, MADANY teaches the operation of identifying one or more application-referenced types comprises: examining the application (program) to identify one or more type references, each type reference being associated with an application-referenced type (component referenced by the application); and generating a dependency list (output file / list / package) identifying the one or more application-referenced types, based on the one or more type references (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67; col. 6, lines 1 - col. 7, line 3).

As to claim 8, MADANY teaches the operation of generating a dependency list comprises: recursively examining an application-referenced type to identify one or more additional type references (component references another dependent component) referenced by the application-referenced type; and adding the one or more additional type references (dependent components) to the dependency list (output file / list / package) (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67; col. 6, lines 1 - col. 7, line 3).

As to claims 9-13, MADANY teaches the operation of identifying one or more client-needed types comprises: identifying the one or more client-loaded types

Art Unit: 2127

(determining that component is already locally stored); and generating a client composite list to identify the one or more client-needed types, the one or more client-needed types (needed component) including the one or more application-referenced types not loaded on the client (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67; col. 6, lines 1 - col. 7, line 3).

As to claim 15, MADANY teaches adding one or more global data fields (components / dependent components) of each needed class to the empty library, the global data fields being extracted from the class library store in the extracting operation (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67).

As to claim 16, MADANY teaches adding components of a needed class to the empty library (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67). It would be obvious to one skilled in the art that a method having a code body is a component of a class and therefore is extracted if needed as disclosed by MADANY.

As to claim 17, MADANY teaches the system extracts needed components to the empty library (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67). MADANY also teaches the invention can be practiced in other systems and programming environments (col. 9, lines 12-24). Official Notice is taken in that a metadata programming environment is well known in the art and therefore metadata would be extracted and placed in the empty library as disclosed by MADANY.

As to claim 18, MADANY teaches an application-referenced type includes a class (needed component) (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67).

As to claims 19-22, MADANY teaches an application-referenced type or a client-loaded type (needed components / referenced components) includes at least one of a method, a class, or a data field (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67).

As to claim 23, reference is made to a method that corresponds to the computer program product of claim 1 and is therefore met by the rejection of claim 1 above.

As to claims 24-27 and 29-33, reference is made to a system that corresponds to the program product of claims 1-22 and is therefore met by the rejection of claims 1-22 above.

As to claim 34, MADANY teaches a computer program product encoding a computer program for executing on a computer system a computer process for creating a customized library (output file / package) comprising: accessing a class library store (location of stored class file); identifying one or more needed classes (necessary classes / components of the classes) referenced by the application but not included with the application (components that are referenced but not already loaded); creating an

Art Unit: 2127

empty library (creates a list); extracting the one or more needed classes (needed components) from the class library store; and adding the one or more needed classes (needed components) to the empty library (list) to generate the customized library (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67; col. 6, line 1 – col. 7, line 3). It would be obvious to one of ordinary skill in the art that the created list / package is initially empty before the necessary components are added to the list as disclosed in MADANY.

As to claim 35, MADANY teaches receiving a composite list specifying the needed classes (col. 8, lines 56-67).

As to claim 36, MADANY teaches adding one or more global data fields (components / dependent components) of each needed class to the empty library, the global data fields being extracted from the class library store in the extracting operation (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67).

As to claim 37, MADANY teaches adding components of a needed class to the empty library (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67). It would be obvious to one skilled in the art that a method having a code body is a component of a class and therefore is extracted if needed as disclosed by MADANY.

As to claim 38, MADANY teaches the system extracts needed components to the empty library (col. 7, lines 10-49; col. 7, lines 60-16; col. 8, lines 56-67). MADANY also teaches the invention can be practiced in other systems and programming environments (col. 9, lines 12-24). Official Notice is taken in that a metadata programming environment is well known in the art and therefore metadata would be extracted and placed in the empty library as disclosed by MADANY.

As to claims 39 and 40, refer to claim 37 for rejection.

As to claim 41, reference is made to a method that corresponds to the program product of claim 34 and is therefore met by the rejection of claim 34 above.

Response to Arguments

3. Applicant's arguments filed 9/9/04 have been fully considered but they are not persuasive.

Applicant argues that Madany does not teach the claim limitations of generating a customized library including one or more client-needed types because Madany creates a packaged file containing all necessary components for program execution and is entirely different output than the customized library in the amended claims that includes types referenced by the application program but not already loaded on the client. The examiner disagrees. Madany states that an interface task and linkage editor on server creates a package of needed components for execution of a program on

client (abstract). Madany also explicitly states that Interface task notifies linkage editor of any class that is already present on client, to thereby avoid unnecessary packaging: linkage editor need not package components that already exist on client, thereby conserving bandwidth usage by minimizing the size of the output file (col. 6, lines 28-33). Therefore, the system of Madany teaches generating a customized library (output file) including one or more client-needed types (needed components referenced by the program) not already loaded on the client. Also the cited claims make no mention that the client-needed types are needed types not loaded on the client. However, even if it is assumed that client-needed types is defined to be needed types not loaded on the client, Madany teaches such.

Applicant argues that the invention functions differently from Madany with the invention because Madany describes a method where the list created by the linkage editor starts with the program to be executed whereas the current invention sends the library separate from the application. The examiner disagrees. First, none of the argued claims teach that the application is sent separately from the library. Therefore, the argument that Madany does not send the application separately from the library is moot. In fact the claims detail the exact opposite by stating sending the customized library and the application to the client. Therefore, the rejection is maintained as detailed above.

Applicant disagrees that the list is initially empty before the necessary components are added to the list because the main method is the first placed in the output file before any application-referenced components are put into the output file.

Art Unit: 2127

The examiner disagrees. First, the examiner would like to point out that Madany states that an interface task and linkage editor on server creates a package of needed components for execution of a program on client (abstract). Madany also explicitly states that Interface task notifies linkage editor of any class that is already present on client, to thereby avoid unnecessary packaging: linkage editor need not package components that already exist on client, thereby conserving bandwidth usage by minimizing the size of the output file (col. 6, lines 28-33). Therefore, the system of Madany teaches generating a customized library (output file) including only one or more client-needed types (needed components for the program) not already loaded on the client. Hence, it would be obvious to one skilled in the art at the time of the invention that the output file would have to be empty and all necessary components, i.e. the main method, referenced components, are added if they are not already stored locally. At best, Applicant's claims state creating an empty library, extracting needed classes from a store, and storing the needed classes in the empty library. The needed classes as detailed in the claims can be any class needed to run for the program to run, regardless if it's the main method or just a component referenced by the main method. Therefore, the examiner believes Madany teaches the limitation is disclosed because Madany teaches creating and sending a customized library containing only one or more client-needed types not already loaded on the client (needed components in order to execute the program). It is irrelevant if the first component is the main method because the main method is one of those needed components.

Applicant then states that the same arguments disclosed above apply to all of the claims and therefore all of the claims are allowable. In response, the examiner has shown that Madany teaches generating a customized library as disclosed in the claim language. Therefore, the examiner believes Madany teaches the invention and maintains the rejection as disclosed above based upon the response provided.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 18, 2005


LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER